D.5.1.11 NO. 1 SET OF DEVICES FOR DIGITAL INFORMATION (NO. 1 MOBILE APP)

Working Package n:	WP5 Developing tools and harmonizing services for a sustainable intermodal mobility
Activity (n. and description):	5.1. Analyzing existing, re-use and development of new smart technological tools and advanced solutions
Deliverable (n. and description):	5.1.11 No. 1 Set of devices for digital information (No. 1 mobile APP)
Responsible Partner:	PP15 – LIRA
Status:	Final
Deadline (as from the original AF):	06/2021
Finalized on:	06/2022

## 1. Background, scope and description of the pilot action

Background: Lika-Senj County is a large county with a small number of inhabitants, which results in problems in transport connections and the availability of some services that are offered only in the county capital Gospić. Therefore, we tried to devise a solution that would provide access to essential health and social services to all residents of the county.

Scope: The purpose of our pilot is to improve transport connections and facilitate access to health and social services offered by the capital for residents from remote areas. In this way, we would lead to an increase in traffic sustainability with a smart solution and the effectiveness will be tested in this pilot.

Description of the pilot/investment. Lika-Senj County is the largest county in Croatia in terms of its territory (5.350 km2; 10% of Croatia) but it is at the same time the smallest county in terms of population (45.450 in 2017; 1% of Croatia), which means that this area is very sparsely populated and many critical services such as health and social care are difficult to access by citizens who do not live in the County's centre in Gospić. Moreover, the intra-county traffic connections – especially with regards to public transportation – are lacking and often times non-existent. Due to the low population numbers in the remote and sparsely populated areas it would not be feasible to introduce all required health and social services in each location. Instead, it would be much more cost-effective to increase the accessibility of high-quality health and social services in the County's Centre in Gospić for the users in the rest of the County by improving traffic modalities. A mobile app (as a smart solution) is developed and based on the traffic model that can be used in other Italian and/or Croatian rural, sparsely populated areas to improve the accessibility issues in these areas.

2. Implementation of the pilot action (including a description of the externalized services/supplies/works)
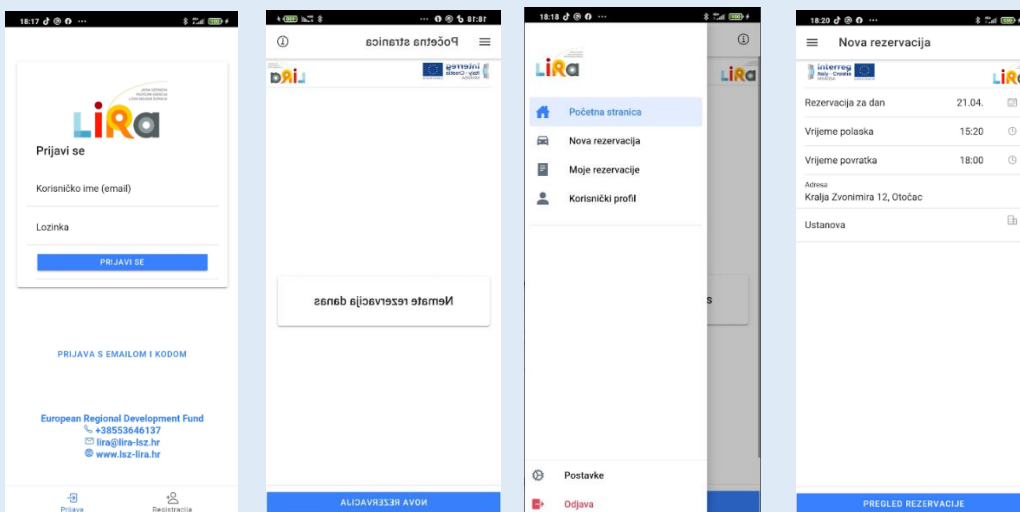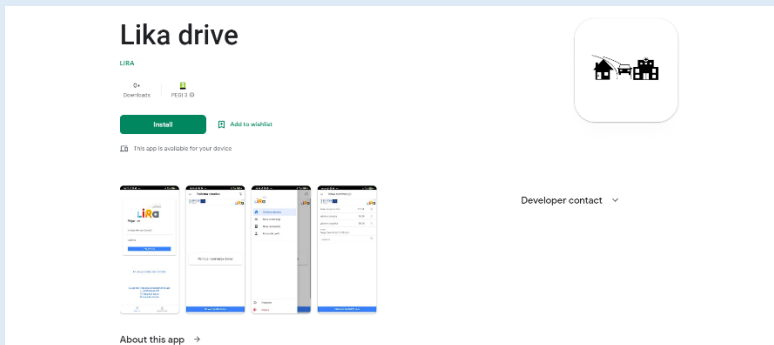
For the development of the mobile application, we hired external experts who developed the application based on the traffic model. Together with them, we participated in the complete process by providing them with the necessary information and regularly monitoring the progress of application development. We conducted one procurement that included the development of activities from WP4 (4.1.6) and WP5 (D.5.1.11). Thus, the development of analysis and traffic model helped us to develop the application in a way that would be as useful as possible for future users. Now is the time to test this pilot.

There are two developed versions, one for drivers and a version for passengers. The ride can be ordered by the passenger, and drivers receive a notification about the ordered ride. After the end of the ride, the driver must confirm that the ride has been completed. As the current economic situation is characterized by constant changes in fuel prices and other costs, the

application allows the administrator to change prices and zones. There is also a ride cancellation time that the administrator can later change.

The app is intended for the provision of driving services and the use of driving services from parts of the county to the famous city of the county with the aim of using defined health and social services.

The main benefits for users of the application are the possibility of finding transportation to reach health and social services that are only located in the county capital. The app should improve the connection between service providers and users of transport services, in an economical (digital) way, which should later lead to better transport connections within the county, which will be based on a smart transport solution.

App for users - https://play.google.com/store/apps/details?id=com.lira.drive
App for drivers - https://play.google.com/store/apps/details?id=com.lira.driver

3. Information about stakeholders role/involvement

The application was developed by external experts, and we included all interested stakeholders in the complete application development process. So through a meeting of the organization "Sustainable mobility quality partnership groups management", we included a local polytechnic university specializing in traffic, organizations who support entrepreneurs, because the users of this application will be not only residents but also drivers who will be in some economic and legal status. By organizing events and media promotion of the application, we also plan to include users of transport services, but also continue to communicate with the stakeholders mentioned so far in order for the application to get the best possible results.

In the pilot testing phase ahead, we are likely to identify some other groups that need to be involved and acknowledge suggestions. We plan and leave the possibility for the users of the application to send some proposals, suggestions and experiences to inform us about the quality of the application and the service it offers. In this way, stakeholders will help us see how successful the pilot was and what results were achieved.

4. Lessons learnt and conclusions

If we could redo the pilot action/investment, we would focus on implementing a comprehensive public transportation system that connects the remote areas of Lika-Senj County to the county capital. This would involve investing in buses or other forms of public transportation that can provide regular and reliable services to these areas. Additionally, we would work on improving the infrastructure and road conditions to make transportation easier and more accessible for residents.

Furthermore, we would also consider investing in telehealth and telemedicine services to supplement the lack of health services in remote areas. This would allow residents to receive medical consultations and treatment remotely, reducing the need for them to travel long distances for healthcare. This could be done through the development of online platforms or mobile apps that connect residents with healthcare professionals.

Overall, by improving the transportation connections and implementing telehealth services, we would be able to address the issues of accessibility to essential health and social services more effectively and efficiently.

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If we could give advice to another city implementing a similar pilot action/investment, it would be to carefully consider the specific needs and characteristics of their own region. Each region has its own unique challenges and constraints, so it's important to tailor the solution to fit those specific circumstances.

Additionally, involving local stakeholders and community members in the planning and implementation process is crucial. They have valuable insights and perspectives that can help ensure the success and effectiveness of the pilot.

Furthermore, conducting thorough research and analysis of the existing transportation infrastructure and services is essential. Understanding the current gaps and limitations will help identify the most effective and feasible strategies for improvement.

Lastly, sustainability should be a key consideration throughout the pilot. This includes not only the environmental sustainability of any transportation solutions but also the long-term financial and operational sustainability. It's important to consider how the pilot can be scaled up and integrated into existing systems to ensure its long-term success.

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Based on our experience in Lika-Senj County, we were able to promote new sustainable mobility solutions in our city by developing a mobile app that addressed the accessibility issues faced by residents in remote areas. The app provided information on transportation options and routes to reach the capital for essential health and social services.

By utilizing the app, residents could easily plan their trips and utilize the available transportation services effectively, leading to an increase in traffic sustainability. This smart solution not only improved the transport connections within the county but also facilitated access to vital services for all residents.

The success of this pilot project demonstrated the effectiveness of smart solutions in addressing transportation and accessibility challenges in sparsely populated areas. This experience allowed us to promote the adoption and implementation of similar sustainable mobility solutions in other rural areas.

By sharing our knowledge and experience, we encouraged the development and implementation of mobile apps or other tools that can improve transportation connections and accessibility in remote areas. This ultimately contributes to a more sustainable and inclusive mobility system, benefiting residents and promoting equitable access to essential services.

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Yes, the expectations of improving transport connections and facilitating access to health and social services for residents in remote areas are realistic goals. By developing a mobile app and improving traffic modalities, it is possible to increase accessibility and provide essential services to all residents of the county. However, it is important to consider the feasibility and potential challenges of implementing such a solution, such as infrastructure limitations and funding constraints.

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The main problem we faced was the lack of transport connections and the limited availability of health and social services in remote areas of Lika-Senj County. To overcome this, we developed a mobile app as a smart solution to improve accessibility. The app provides information on public transportation routes and schedules, allowing residents from remote areas to easily access the county capital, Gospić, where most of the essential services are located. By providing this information in a convenient and user-friendly way, we hope to encourage more people to utilize public transportation and improve traffic sustainability in the county. Additionally, we are considering partnerships with local transportation providers to ensure reliable and efficient services for residents.

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The enabling technologies within the project include the development of a mobile app to improve traffic modalities and increase accessibility to health and social services. Additionally, the project may utilize GPS technology to track and provide real-time information on transportation options and routes. Other potential enabling technologies could include digital communication systems for remote consultations and telemedicine services.

5. Problems found and adopted solutions

We encountered some problems while defining the application. The health crisis (COVID-19) has significantly slowed down work on application development. There are also some technical issues that we addressed during the development of the application itself, such as the issue of driving cancellation time, research of potential drivers, the ability of the population of rural areas to

successfully use the application. As a consequence of the current economic situation, there is a problem of fuel price formation, which greatly affects the future use of our application. However, in the app itself, we anticipated the possibility of changing the prices of travel, in order to respond to some similar potential problems. It is possible that when testing the application, some more challenges arise, for which we will try to find solutions. Pilot testing will also help us identify application weaknesses that will help us adapt our future traffic smart mobility/traffic solutions to the needs of our region.

6. Expected follow up (after project closure)

After the completion of the pilot project, we expect to see significant improvements in transport connections and access to health and social services for residents in remote areas of Lika-Senj County. The mobile app that was developed as a smart solution to address these issues is expected to continue playing a key role in facilitating access to essential services.

The mobile app and traffic model developed for Lika-Senj County can serve as a valuable blueprint for improving accessibility in these areas, creating a more sustainable and efficient transportation system for residents.

In addition, the pilot project is expected to generate valuable data and insights that can be used to further optimize and refine the mobile app and traffic model. Feedback from residents and service providers will be collected to identify areas for improvement and potential expansion of services.

Long-term sustainability of the project will be a priority, with secured funding for ongoing maintenance and updates to the mobile app, as well as continued investments in transport infrastructure. Collaboration between local authorities, healthcare providers, and transportation agencies will be crucial in ensuring the continued success of the initiative.

Overall, the expected follow-up after project closure is the continued use and development of the mobile app and traffic model, with the goal of improving access to essential services for residents in remote and sparsely populated areas. The success of the pilot project will pave the way for similar initiatives in other regions, ultimately leading to a more connected and accessible healthcare and social services network.